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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,741	08/01/2003	John Frederick Ackerman	RD-26408-5	3858
John S. Beulick Armstrong Teasdale LLP Suite 2600 One Metropolitan Square St. Louis, MO 63102				
EXAMINER PERRIN, JOSEPH L.				
ART UNIT 1792				
PAPER NUMBER				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/632,741

**Applicant(s)**

ACKERMAN ET AL.

**Examiner**

Joseph L. Perrin, Ph.D.

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 October 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 18-23 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's instant amendment has overcome the new matter rejection under 35 USC 112, first paragraph. However, the amendment has resulted in additional rejections under 35 USC 112, first and second paragraph.
2. Applicant's arguments filed 02 October 2008 have been fully considered but they are not persuasive.
3. Regarding the 102(b) rejection of claims 20-23 over BARTOS, applicant argues that BARTOS does not disclose the claimed ring manifold which is "selectively operable to inject a first liquid" and "selectively operable to inject a second liquid...to facilitate reducing a rate of formation of particulate matter within the gas turbine engine by suppressing electrostatic attraction within the gas turbine engine", further alleging that "Bartos describes a ring assembly that includes a multiplicity of holes that enable the injection of water, preservative, cleaner, and solvent". The Examiner disagrees. Firstly, the intended use of the liquid usable in the apparatus (i.e. to facilitate reducing formation of particulate matter...) is not afforded patentable weight as the liquid is not part of the apparatus (see page 4 of the BPAI Decision on 05/30/2007 affirming the Examiner's position). Secondly, given the 112 issues regarding the newly added language of the manifold nozzles being "selectively operable" to inject a first and second liquid and the immense breadth of such recitation since no description of the language is supported in the original disclosure as filed, the claimed language

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is construed to broadly read on any configuration capable of selectively applying a first and second liquid. For instance, this configuration is readable on a controller operating the liquid application, valves controlling fluid flow, or separate tanks operable to apply at least two liquids. As can be readily seen in Figure 2 of BARTOS, there is disclosed plural reservoirs (18/20/22/24) which are valve controlled to supply the different liquids to spray manifold (96). Thus, the spray manifold of BARTOS is "selectively operable" to discharge at least a first and second liquid and reads on the claimed apparatus.

4. Regarding the 102/103 rejection of claims 18-20 over BARTOS alone or in combination with BECK or MCDERMOTT, applicant argues reasons of same indicated above which are not persuasive because BARTOS reads on the claimed apparatus as indicated above.

5. Regarding the 102(b) rejection of claim 18 over BECK, applicant argues that BECK does not disclose the ring manifold being "selectively operable" to inject a first and second liquid. This is not persuasive because Figure 2 of BECK clearly discloses valves (23/24) which are selectively operable by controller (27) to inject fluids via nozzles (11) of the nozzle ring. Accordingly, BECK reads on the apparatus as claimed.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 18-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 18 and 20, the recitation of the nozzles being "selectively operable" to discharge a first and second liquid is new matter. This broadening of scope, readable on various configurations including a controller, valves, separate nozzles, and combinations thereof, which are not included in the original disclosure as filed is improper and constitutes new matter.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 18-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 18 and 20, it is unclear what is meant by the nozzles being "selectively operable" to discharges a first and second liquid. Is this performed by a controller, valves, separate nozzles, combinations thereof, or other configurations? Clarification and correction are required.

***Claim Rejections - 35 USC § 102***

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,059,123 to BARTOS (previously cited). Re claims 20 & 22, BARTOS discloses the claimed structure of a washing system (10) for a gas turbine engine including a pump (compressor 14), ring manifold (96) having plural circumferentially-spaced spray nozzles selectively operable (i.e. via a controller and/or valves) to discharge a liquid radially inward (i.e. horizontally) into the turbine engine to be treated, and a controller (26) configured to inject plural liquids from fluid reservoirs (18/20/22/24) (see Figures 1, 2, 6, and relative associated text). It is noted that the intended use of the liquid is not afforded patentable weight and does not provide a structural limitation to the claimed apparatus. The examiner notes that for claim 22, the action of the liquid (i.e. one that "coats") is intended use and does not serve to structurally distinguish as generally all liquids are capable of coating to some degree. Re claim 21, BARTOS discloses controlling the sequence of the liquid treatments (col. 1, lines 39-41 & 59-62). Re claim 22, BARTOS further discloses the use of a starter motor to rotate the engine while spraying a treatment liquid (col. 1, lines 27-28 & claim 1). Accordingly, recitation of BARTOS reads on applicant's invention as claimed.

12. Claims 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by BARTOS, or in the alternative as being obvious over BARTOS in view of BECK or

U.S. Patent No. 5,273,395 to MCDERMOTT. BARTOS discloses the claimed combination of a gas turbine engine and a washing system for a gas turbine engine (10) comprising a pump (14) to pump liquids through a ring manifold (96) having plural circumferentially-spaced spray nozzles selectively operable (i.e. via a controller and/or valves) to discharge a liquid radially inward (i.e. horizontally) into the turbine engine to be treated, and a controller (26) configured to inject plural liquids from fluid reservoirs (18/20/22/24) (see Figures 1, 2, 6, and relative associated text). Re claim 19, BARTOS further discloses the use of a starter motor to rotate the engine while spraying a treatment liquid (col. 1, lines 27-28 & claim 1). BARTOS discloses using the claimed washing system in combination with a gas turbine engine and the position is taken that one having ordinary skill in the art would reasonably interpret the disclosed gas turbine engine as a conventional gas turbine engine with a compressor, either inherently or implicitly, particularly since it is common knowledge that compressors are part of a . However, even if assuming *arguendo*, one were to construe the gas turbine compressor of BARTOS as not having a compressor, both BECK and MCDERMOTT are directed to cleaning a gas turbine engine with a compressor.

Because the gas turbine engines of BARTOS, BECK and MCDERMOTT are structural equivalents readily recognized by one having ordinary skill in the art, the position is taken that simply substituting the known gas turbine engine of BARTOS for the structural equivalent gas turbine engines of BECK or MCDERMOTT would have yielded the same predictable result of cleaning/treating a gas turbine engine with compressor using a spray ring manifold.

13. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by BECK. BECK discloses a gas turbine engine with compressor combined with a plurality of spray nozzles (11) on ring manifold (13) which are circumferentially spaced around an opening of turbine (1) and selectively operable (i.e. via a controller (27) and/or valves (23/24)) to spray a first fluid and second fluid radially inward via fluid lines (19/20) (see entire document, for instance, Figures 1-2 and relative associated text).

### ***Conclusion***

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone



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number is (571)272-1305. The examiner can normally be reached on M-F 8:00-4:30.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/  
Joseph L. Perrin, Ph.D.  
Primary Examiner  
Art Unit 1792

JLP